



May 17, 2011

Mr. Anthony Saracino
Chair, California Water Commission
Department of Water Resources
P. O. Box 942836
Sacramento, CA 94236

SENT VIA EMAIL TO cwc@water.ca.gov

RE: The Draft Agricultural Water Measurement Regulation Fails to Comply with SB 7x 7 and Must be Revised

Dear Mr. Saracino and Members of the Commission:

On behalf of the Natural Resources Defense Council, the Pacific Institute, and Sierra Club California, which together have several hundred thousand members and activists in California, we are writing to recommend that the California Water Commission reject the proposed draft agricultural water measurement regulation, which the Commission will review at its May 18, 2011 meeting. Our organizations were members of the Agricultural Stakeholder Committee that was involved in the development of this regulation. Unfortunately, as discussed in more detail below and on the pages that follow, the draft regulation fails to comply with the requirements of SB 7x 7 of 2009, the Water Conservation Act of 2009 (“Act”), and it is both unlawful and bad public policy. We strongly urge the Commission to reject the current draft regulation, and ensure that it is revised to conform to the requirements of the Act.

With respect to agricultural water efficiency, the Act requires water suppliers to, “[m]easure the volume of water delivered to customers with sufficient accuracy to comply with subdivision (a) of Section 531.10,” and to implement volumetric pricing. Water Code § 10608.48(b). Additional practices to improve efficiency are required to be implemented if they are technically feasible and locally cost effective. *Id.* § 10608.48(c). The Act incorporates and strengthens agricultural water measurement requirements of AB 1404 of 2007 (Asm. Laird).

We appreciate that the Department of Water Resources eliminated the exemption for CVP contractors in its May 3, 2011 draft regulations, following our repeated comments that this proposed exemption clearly violated the requirements of the Act. However, the draft agricultural water measurement regulation still fails to comply with the statutory requirements of the Act in several key respects.

- The draft regulation fails to require measurement of water deliveries to individual customers at the farm gate, as the Act intends, and instead allow measurement of water deliveries to multiple farmers.
- The draft regulation fail to require accurate measurement of the volume of water delivered to customers, allowing instead the certification of the accuracy of flow rate or velocity, which alone do not constitute volume.

In addition, the draft regulation includes several provisions that appear to weaken the measurement requirements, despite the Act's clear intent. Most importantly, the draft regulation allows for a poorly defined process of "field analysis" of existing water measurement devices, instead of requiring testing of a representative sample of measurement devices to ensure their accuracy.¹ Another provision of the draft regulation² imposes no deadline to ever replace, repair, or upgrade measurement devices that are determined to be inaccurate. Both of these provisions fail to ensure the accuracy of the reporting data, and both provisions should be either strengthened or removed from the regulation.

On the pages that follow, we have provided more detail on these key issues, and we have recommended language to ensure the final regulations are consistent with the statutory requirements of the Act.

Thank you for consideration of our views. Please feel free to contact us at your convenience if you have any questions or concerns.

Sincerely,

Doug Obegi
Natural Resources Defense Council

Jim Metropulos
Sierra Club California

Dr. Juliet Christian-Smith
Pacific Institute

¹ Section 597.4(a) calls for testing a statistically representative sample of previously installed measurement devices, and then 597.4(b) inexplicably recommends that testing be capped at 100 individual devices regardless of the number of devices that would actually constitute a statistically representative sample. Thus the regulation does not require testing a statistically representative sample of the measurement devices, as it should.

² Sec. 597.4(d)(2) and (3).

Recommended Changes to the Draft Agricultural Water Measurement Regulation to Comply with the Water Conservation Act of 2009

(1) The Draft Regulation Fails to Require Measurement of Water Deliveries to Customers at the Farm Gate

Section 597.3(b) of the draft regulation authorizes agricultural water suppliers to avoid the requirement to measure water deliveries at the farm gate, and instead allows measurement upstream of the customer delivery point. This exemption from measurement of water delivery at the farm gate is allowed if: (i) the supplier does not currently have access to the customer delivery point; or (ii) if the accuracy standard cannot be met with a single measurement device, “such as occurs for rice cultivation.” As a result, DWR’s economic analysis expects that half of all acreage subject to the regulation in the Sacramento Valley will not be measured at the farm gate. See DWR, Cost Analysis for Proposed Agricultural Water Measurement Regulation in Support of Economic and Fiscal Impact Statement, April 22, 2011, at p. 10.

California is the number two rice producing state in the nation, and in 2010, over 550,000 acres of rice were harvested (nearly all from six contiguous counties in the Sacramento Valley), an amount of harvested acreage that was second only to hay among all crops harvested statewide. With an average water duty of five acre-feet per acre, rice production draws nearly 3 million acre-feet of water per year, a staggering amount roughly equal to the customer demand of five cities the size of Los Angeles. Nothing in the language of the statute suggests any legislative intention that such a significant sector of agricultural water use – indeed, such a significant portion of water use statewide – should be broadly exempt from the state’s farm-gate measurement requirement. Neither of these exemptions is consistent with the requirements of the Act, and both exemptions should be revised so that narrow exemptions are provided for the small number of farmers that truly cannot comply with the critical measurement requirement.

(i) Lack of Access Exemption

As currently drafted, section 597.3(b)(A)(i) of the draft regulation allows water suppliers to avoid measuring water deliveries to customers at the farm gate if the water supplier currently lacks access to the customer delivery point (farm gate).³ Some water suppliers may have never needed legal access to the farm gate, but are authorized by law to acquire such access. Indeed, the current draft language does not even require a water supplier to ask to obtain access, let alone use its legal authorities to do so. This exception is overbroad and is inconsistent with the intent and requirements of the Act, and the language should be revised to provide a more narrowly drawn exception that is consistent with the intent of the law.

³ The term “customer delivery point” in the draft regulations is unnecessary and introduces additional confusion. Instead, the draft regulations should cross-reference the definition of “farm gate” in section 531(f) of the Water Code (““Farm-gate” means the point at which water is delivered from the agricultural water supplier’s distribution system to each of its customers.”).

RECOMMENDATION: Revise subpart 597.3(b)(A)(i) to read as follows:

(A)(i) The agricultural water supplier does not have, and lacks the legal authority to obtain, sufficient access to allow for the installation, operation, and maintenance of measurement devices at customer delivery points.

(ii) Single Measurement Device Exemption

There is no basis in law for the “single measurement device” exemption in section 597.3(b)(A)(ii) of the draft regulation. This exemption appears to be an attempt to incorporate a “locally cost effective” exemption into the regulation, notwithstanding the statutory requirements to the contrary. As noted earlier, the Act incorporates and builds on the requirements of section 531.10(a) of the Water Code, which was enacted as part of AB 1404 of 2007 (Laird). Section 531.10(a) requires agricultural water suppliers to report farm-gate water delivery data, and section 531.10(b) exempts suppliers from having to comply with this and other requirements of AB 1404 if the programs or practices are not locally cost effective.

However, two provisions of SB 7x 7 conclusively demonstrate that a “locally cost effective” exemption does not apply to the measurement requirement: first, the Act includes explicit cost-effectiveness exemptions for other efficiency practices, but not with respect to water measurement and volumetric pricing requirements; and second, the 2009 legislation did not reference or incorporate subdivision (b) of section 531.10 (the locally cost effective exemption of AB 1404), instead only referencing subdivision (a) of section 510.10. *Id.* § 10608.48(c).

While we recognize that installation of a second measurement device if needed for accurate measurement would increase costs of compliance, the Legislature has determined that local cost effectiveness is not a valid exemption from the requirement to measure the volume of water delivered to customers at the farm gate. Limiting this language to one measurement device is an unreasonable interpretation of and contrary to the language of the statute.

Additionally, any exemption based upon an unavailability of equipment to accomplish the measurement task should require periodic recertification, to account for improvements in measurement technology in future years.

RECOMMENDATION: Revise section 597.3(b)(A)(2) to read as follows:

The agricultural water supplier has determined that the applicable accuracy standard of 597.3(a) cannot be met with commercially available measurement devices, where the agricultural water supplier provides documentation of the flow rates, elevations, and operating conditions that make it impossible to measure volume at each customer turnout for which the measurement exemption is claimed, and these data and the finding have been reviewed, signed and stamped by a registered Professional Engineer. An agricultural water supplier that utilizes the provisions of this section must demonstrate compliance with this section every three years, to account for changes in technology or cultural practices that may enable compliance with section 597.3(a).

(2) The draft regulation fails to require the measurement of volume with sufficient accuracy

The Act requires the water supplier to “[m]easure the volume of water delivered to customers with sufficient accuracy to comply with section 531.10(a)” and implement volumetric pricing. Water Code § 10608.48(b) (emphasis added). However, the current draft regulations fail to require accurate measurement of the volume of water deliveries, because it allows for the certification of the accuracy of either flow rate or flow velocity measurements, instead of requiring certification of the accuracy of the volume of water deliveries to the customer.

Sections 597.3(a) and (b) of the draft regulation provide numeric accuracy standards, but these sections only require the measurement be certified to be accurate “by flow rate, velocity or volume.” Similarly, section 597.2(a)(1) defines accuracy to mean the measured “flow rate, velocity or volume relative to the actual flow rate, velocity or volume.”

However, no provision of the draft regulation requires the *measurement of the volume of water* deliveries be accurate. Neither flow rate nor flow velocity constitute volume without the addition of additional variables, which themselves are subject to measurement error. Although water suppliers are required to document the procedures used to convert measured flow rate or flow velocity into volume, *see* draft regulation § 597.4(d)(4), no criteria are established for the level of accuracy of the computed volume resulting from such procedures. It should be noted that the Bureau of reclamation's conservation criteria for CVP contractors is stated as an accuracy standard for volume. Thus, the current draft of the DWR regulation is substantially weaker than the standard applicable to most federal irrigation contractors today.

The statutory language plainly requires sufficiently accurate measurement of the volume of water deliveries, which is not interchangeable with velocity or flow rate. The accuracy band applied to each of these terms will not be identical, because the measurement of either velocity or flow rate alone is not sufficient to provide a measurement of volume, but rather requires additional measurements, such as cross section (in the case of velocity) and time (in the case of flow rate).

RECOMMENDATION: Revise Section 597.2(a)(1) to delete the words “flow rate” and “velocity” from the definition of “accuracy”, and revise Sections 597.3(a) and (b) to delete the words “flow rate” and “velocity” from the range of options for agricultural water measurement.